Beginnings of Track Reconstruction

Brian Page
Michigan State University

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Track Objects

- Right now rather simple definition, until important parameters are known.
- int plane -which plane the track is on
- double avgSig -average ionization along track
- double totSig -total ionization along track
- double slope -slope in view of plane
- double variance -tells how linearly correlated track is
- std::vector <const recobase::Hit* > &hits
  -actual collection of hits

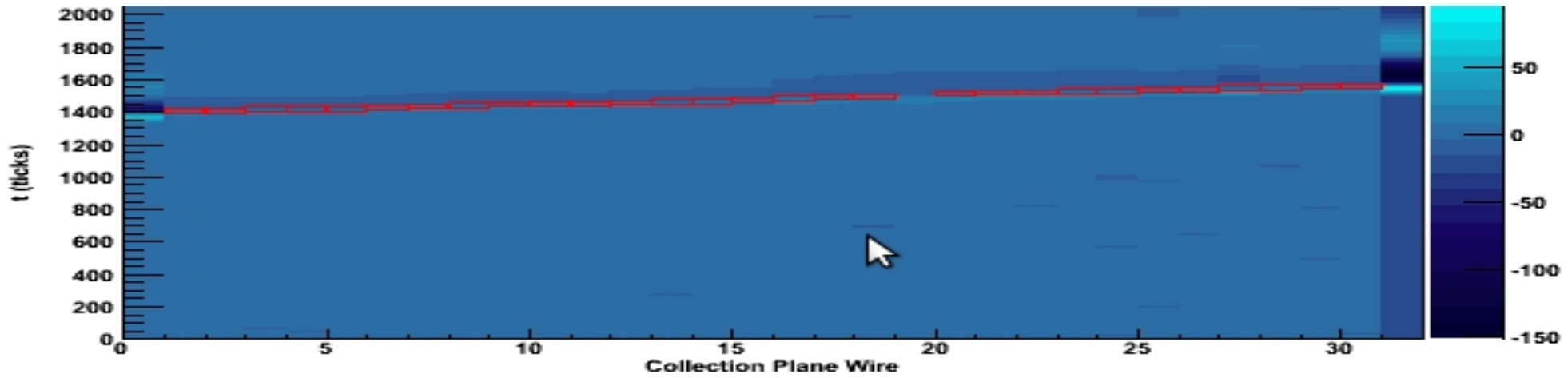
Simple Algorithm For Through-Going Muons

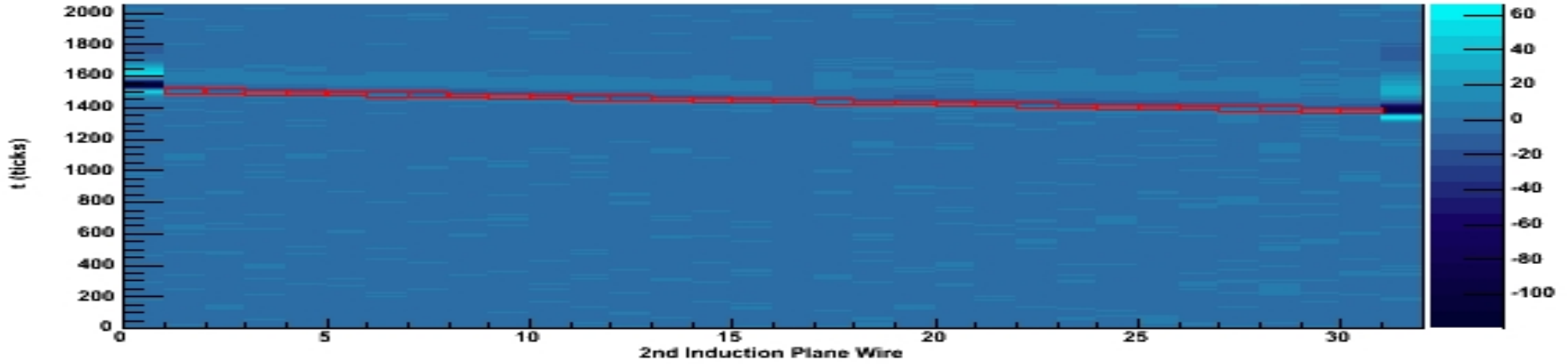
- Have implemented a simple linear track finding algorithm.
- Assumes use of perfect hit finding algorithm.
- Designed for the purpose of identifying straight tracks in an appropriate way for a first cut on Argoneut neutrino data, to eliminate events with only through-going muons.
- Currently only working on Bo Data.

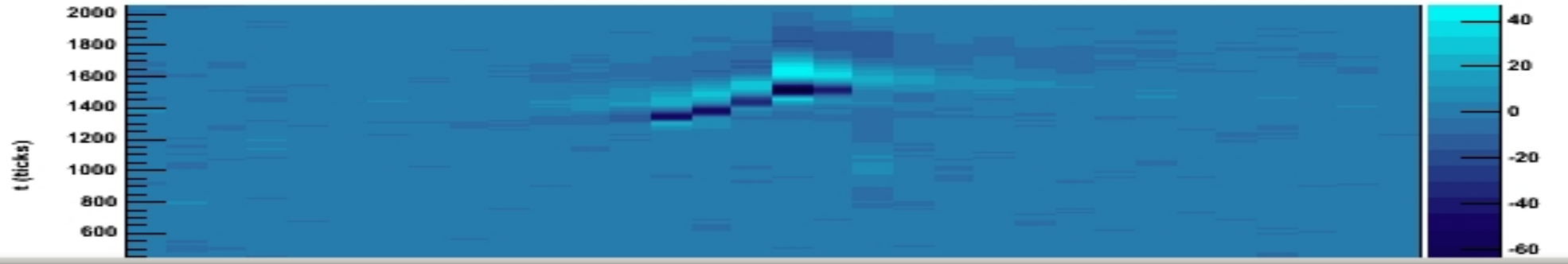
PlaneView

File Edit Window Job Help

<-Previous | Next-> | Reload | ../bo_data/R089_D20080807 [Run/Event]= 89 2 | Go | Print







To Do List

- Make code detector independent so it works on Argoneut as well as Bo.
- Make the algorithm more robust, dealing with missed hits, kinks, nearby delta rays, and other non-uniformities.
- Use geometry, and correlation of tracks to identify if entrance/exit is near the edges, and perhaps a flag on through-going tracks.
- Make display differentiate different tracks.